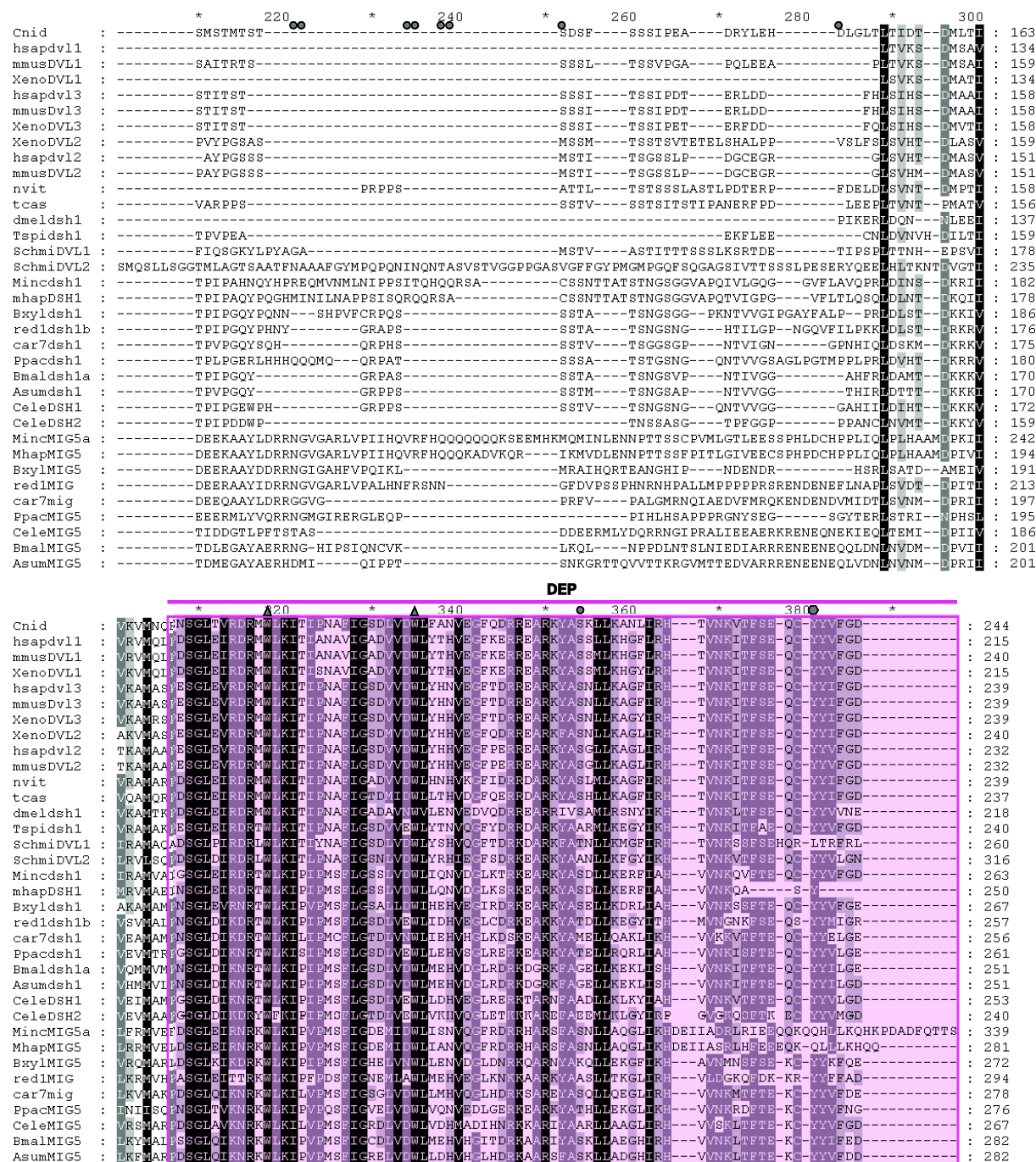


Figure S2A

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Figure S2B



**Figure S2** Protein alignment from the beginning of the PDZ domain through the end of the DEP domain across animals. (A) is the first half of the alignment and (B) is the second half. A nucleotide version of this alignment was used to generate the phylogenetic tree from figure 3. Domain features are highlighted in color and labeled, including PDZ, NLS, SH3, DLF, and DEP. The conserved tyrosine 473 (Y473) is labeled with a polygon (●). Codons identified to be under negative selection are labeled with a triangle (▲) while codons identified as experiencing diversifying selection are labeled with a circle (○).